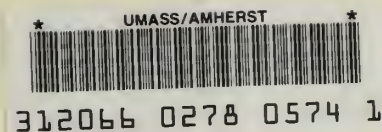


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CAREERS AND TRAINING
IN THE
ALLIED HEALTH FIELD

COMMONWEALTH OF MASSACHUSETTS

Division of Employment Security

*Michael S. Dukakis, Governor
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CAREERS AND TRAINING
IN THE
ALLIED HEALTH FIELD

JANUARY 1985

PREPARED BY

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FORWARD

Careers and Training in the Allied Health Field was prepared by the Massachusetts Occupational Information Coordinating Committee (MOICC) in cooperation with the Division of Employment Security. The MOICC is not a major producer of labor market or occupational information but, rather, is working to:

- * Improve existing data and information for program planning and occupational guidance.
- * Facilitate communication among users and producers of occupational information.
- * Assist in identifying the types of occupational information that are needed by and are available from various groups.

MOICC is administratively located within the Division of Employment Security and receives its goals and direction from its statutory members:

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Associate Secretary
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Employment Policy

The Committee hopes this booklet will spur interest as well as answer questions about career opportunities in the health care field.

We welcome your comments and suggestions which may be addressed to:

Massachusetts Occupational Information
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INTRODUCTION

Health services is one of the fastest growing industries in Massachusetts, with nearly 70,000 new jobs expected before the decade is out. Many more additional opportunities will be created as individuals are promoted or leave the field. Clearly, the medical field offers bright prospects for anyone seeking a rewarding and challenging career.

This booklet presents information on twenty-three allied health occupations. The term "allied health" is often used to describe occupations or occupational groups composed of individuals who assist, facilitate and complement the work of physicians and other specialists in the health care system. Sometimes these jobs are called "paramedical occupations", although the term allied health is more commonly used. There is no standard list of these occupations. We have chosen twenty-three which illustrate the variety of skills, interests, and patient contact to be found in careers in the health field.

Careers and Training in the Allied Health Field is intended not only for high school students who are just beginning to think about the future, but also for those who are out of school and thinking about a new career or a career change and who have always had an interest in working with and helping others. We hope this booklet will stimulate interest at the same time it answers many of your questions about this exciting field.

Organization of This Booklet

Each occupational description is presented in a format which provides information in the following categories.

- o Nature of the Work gives a short summary of the principal job tasks. Salary information is also provided where available so users can compare earnings among the different occupations discussed.
- o Training Required discusses the level and type of training needed for entry into the occupation. Organizations which confer professional credentials and the state agencies responsible for occupational licensing are also cited in this section.
- o Places of Work identifies the industries (not individual employers) which are the major employers of individuals in the occupation. This information is derived primarily from the Division of Employment Security's Occupational Employment Statistics Program.
- o Job Outlook looks at employment trends in Massachusetts affecting future career opportunities.
- o Schools and hospitals in Massachusetts which offer postsecondary programs appropriate for entry into the occupation are listed by certificate, diploma, and bachelor/graduate degree level. Short-term training programs are not included in these listings.
- o For More Information about career requirements and opportunities readers can refer to the organizations and publications that are listed in this section.

Two appendices supplement information presented in the individual occupational descriptions. Appendix A provides an alphabetic listing of the schools cited, including their addresses and telephone numbers. Appendix B lists the names and addresses of the Service Delivery Areas operating programs under the Job Training Partnership Act (JTPA). A listing of specific programs currently offered by the SDA's was not available at the time this booklet was being prepared, but individuals interested in finding out more about JTPA programs are encouraged to contact the SDA serving their city/town.

Please note that inclusion of any school or hospital does not constitute an endorsement of the programs being offered and, while we sought to provide accurate and complete information, errors and omissions may have occurred. School information is for the 1984-85 school year.

State Licensing

As the allied health field becomes more professionalized and as medicine as a whole gains in technological sophistication and specialization, there is a greater need to insure the competence and skill of individuals practicing in the field. Professional organizations have long served this function through credentialing. However, in recent years the state has extended medical licensing to a number of the allied health professions. Listed below are the names and addresses of agencies and boards in Massachusetts which are responsible for certifying individuals in selected allied health occupations. Requirements for state licensing are noted in the individual occupational descriptions.

Board of Registration in Dentistry
100 Cambridge Street, Room 1508
Boston, MA 02202
(617) 727-3076, Ext. 29 and 33

Department of Public Health
Office of Emergency Medical
Services
80 Boylston Street
Boston, MA 02116
(617) 727-0564

Board of Registration of Allied Health
Professions
100 Cambridge Street, Room 1509
Boston, MA 02202
(617) 727-3076

Board of Registration in Nursing
100 Cambridge Street, Room 1509
Boston, MA 02202
(617) 727-3076

The Massachusetts Occupational Information Coordinating Committee (MOICC) has prepared a Directory of Licensed Occupations in Massachusetts which includes licensed occupations in the health field. The Directory may be obtained by contacting the MOICC.

Alternative Sources of Training

In addition to the schools and hospitals identified in this booklet, those interested in a career in health may wish to investigate several alternative approaches to training which are discussed below.

The Armed Forces provides training and job experience in a wide variety of health occupations. Students interested in finding out more about opportunities in the military should contact the recruiting office of the service branch of interest (Air Force, Army, Coast Guard, Marine Corps or Navy). These offices

are listed in the phone book. Counselors and guidance personnel can also contact the recruiting commands and ask to speak with the Education Specialist or Education Coordinator. This individual can provide information and literature about training opportunities and requirements which can be helpful to students or clients.

Specialized short-term training is available from agencies operating programs under the Job Training Partnership Act (JTPA). Information on eligibility requirements and training opportunities under JTPA can be obtained from the Service Delivery Area (SDA) offices listed in Appendix B. Local Job Service (Job Matching) offices of the Division of Employment Security can also provide information on training and services offered under JTPA and other government sponsored programs.

The Job Corps is an alternative source of job and life skills training for young persons who meet the eligibility requirements. To find out more about Job Corps write or phone: Job Corps, Employment and Training Administration, JFK Federal Building, Room 1700, Boston, MA 02203, (617) 223-4694.

The Divisions (or Departments) of Continuing Education in colleges and universities offer workshops, courses and degree programs which are separate from the day programs offered by these institutions. They also vary more from year to year as these Divisions try to keep pace with community needs and changing career trends. Individuals investigating college and university programs should not neglect training opportunities available through these Divisions. The college or university can connect you with their Continuing Education department.

The National Home Study Council accredits courses and programs which have been designed to allow the student to study on his or her own. They list several accredited programs in the health field. To obtain a directory of accredited home study schools write to: National Home Study Council, 1601 18th Street, NW, Washington, DC 20009.

Additional Sources of Information

In addition to sources cited in each of the occupational descriptions, the publications listed below also provide excellent information on careers in the health field.

Occupational Outlook Handbook
1984-85 Edition, Bulletin 2205
U.S. Department of Labor
Bureau of Labor Statistics
April 1984

Health Careers Guidebook
Fourth Edition, 1979
U.S. Department of Labor, Employment
and Training Administration
U.S. Department of Health, Education and
Welfare, Health Resources Administration

Occupational Outlook Quarterly
U.S. Department of Labor
Bureau of Labor Statistics
Winter 1983

See article: "Medical Technology of the 1980's: Giving Birth to New Health Careers"

Information on the publications above can be obtained from: Bureau of Labor Statistics, Boston Regional Office, JFK Federal Building, Suite 1603, Boston, MA 02203, (617) 223-6761.

The Committee on Allied Health Education and Accreditation (CAHEA) certifies training programs in the allied health field. Information about health careers and accredited programs is available by writing to them at: American Medical Association, Department of Allied Health Education and Accreditation, 525 N. Dearborn Street, Chicago, IL 60610.

CAHEA publishes a free booklet entitled "24 Allied Health Careers" and provides free single copies of individual program listings. The complete listing of all CAHEA accredited programs is available in the Allied Health Education Directory, 11th Edition, which can be obtained for \$14.00 plus \$4.00 UPS and handling from the AMA Order Department, Number OP-159, 535 N. Dearborn Street, Chicago, IL 60610.

The Higher Education Information Center (HEIC) provides free information and counseling services on career planning, school selection, admissions, training, technical programs and financial aid. They also have an extensive library of occupational and educational information. The HEIC serves the greater Boston area on a walk-in or appointment basis, and all of Massachusetts through a telephone hot-line called the Career and Learning Line. HEIC is located at the Boston Public Library, 666 Boylston Street, Copley Square. The hot-line number is (617) 536-0200 for greater Boston, or toll-free at 1-800-442-1171 from anywhere in the state.

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OCCUPATIONAL DESCRIPTIONS

BIOMEDICAL EQUIPMENT TECHNICIANS

NATURE OF THE WORK

Biomedical equipment technicians construct, install, maintain and repair various types of medical electronic equipment and instruments such as kidney dialysis machines, heart pacemakers, patient monitoring devices, x-ray units, and clinical laboratory analyzers. They may also instruct medical and research staff on the proper care and use of this equipment. Earnings vary widely depending upon education, experience, duties, and geographic location.

TRAINING REQUIRED

Completion of a two year associate degree program in biomedical engineering technology, electronics, or a related engineering science is the minimum preparation for these technicians. Training is also available in the Armed Forces. Once hired, a period of on-the-job instruction is usually needed before a technician is considered fully qualified.

PLACES OF WORK

Biomedical equipment technicians work in hospitals, in medical and dental laboratories, in government agencies, and in firms which manufacture or service medical equipment.

JOB OUTLOOK

As medical equipment continues to become more technologically sophisticated, individuals who have received specific training in biomedical equipment and instrumentation technology will have the best job prospects.

SCHOOLS

The following Massachusetts schools offer programs in biomedical equipment and instrumentation engineering technology.

Associate Degree Programs

Franklin Institute of Boston,
Boston

Springfield Technical Community
College, Springfield

Individuals interested in this field should also investigate programs in electronics technology. Although these do not train students specifically for work with biomedical equipment, they do provide the basic electronics instruction that is needed by these workers.

FOR MORE INFORMATION

Additional information on career requirements and opportunities in biomedical equipment and instrumentation is available from the following source.

Biomedical Engineering Society
P.O. Box 2399
Culver City, California 90230

DENTAL ASSISTANTS

NATURE OF THE WORK

Dental assistants perform both office and clinical tasks. They maintain and order supplies, file dental records, schedule appointments, handle billing, prepare patients for examination, process dental x-rays, and assist the dentist at chairside. Assistants generally earn from \$10,000 to \$14,000 a year, depending upon their education and experience and on the geographic location and size of their employer's dental practice.

TRAINING REQUIRED

Although some dentists train assistants on the job, most prefer to hire individuals who have completed a formal program in dental assisting. Professional certification through the Dental Assisting National Board, Inc., though not usually required, is helpful when seeking employment. Advancement to a position as a dental hygienist requires additional training.

PLACES OF WORK

Most dental assistants employed in Massachusetts work in dentists' offices and dental clinics (96%). A small percentage work for the federal government (2%) and in hospitals (1%).

JOB OUTLOOK

Opportunities for both full-time and part-time employment should remain good through the 1980's. Graduates of academic programs in dental assisting will enjoy the best prospects.

SCHOOLS

The following schools in Massachusetts offer programs in dental assisting.

Certificate Programs

Blue Hills Technical Institute, Canton	Charles H. McCann Technical School, North Adams
Bryman School, Brookline	Middlesex Community College, Bedford
Diman Regional Technical Institute, Fall River	Minuteman Regional Vocational Technical High School, Lexington
David Hale Fanning School of Health and Technical Occupations, Worcester	Quincy Junior College, Quincy
Greater Lawrence Regional Vocational Technical School, Andover	Southeastern Vocational Technical High School, South Easton
Lynn Vocational Technical Institute, Lynn	Springfield Technical Community College, Springfield

Associate Degree Programs

Boston University Metropolitan
College, Boston

Chamberlayne Junior College,
Boston

Middlesex Community College,
Bedford

Mount Ida Junior College,
Newton

Quincy Junior College,
Quincy

FOR MORE INFORMATION

Additional information on career requirements and opportunities in dental assisting is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics
American Dental Assistants Assoc.
666 North Lake Shore Dr.
Suite 1130
Chicago, Illinois 60611

Commission On Dental Accreditation
American Dental Association
211 East Chicago Ave.
Chicago, Illinois 60611
Dental Assisting National Board, Inc.
666 North Lake Shore Dr.
Suite 1136
Chicago, Illinois 60611

DENTAL HYGIENISTS

NATURE OF THE WORK

Dental hygienists work under the direction of dentists to help patients develop and maintain good oral health. They examine, clean and polish teeth, give fluoride treatments, expose and develop dental x-rays, and advise patients on the proper care of their teeth and gums. Hygienists generally earn from \$13,000 to \$18,000 a year depending upon the number of hours worked and on the size and location of their employer's dental practice.

TRAINING REQUIRED

Completion of an associate degree program usually is sufficient for those wishing to practice in a private dental office. A bachelor's or more advanced degree may be required for research or for employment in public or school health programs. Applicants can expect to face keen competition for admission into dental hygiene programs, and early application is recommended. Hygienists must be licensed by the Board of Dental Examiners in order to practice in Massachusetts.

PLACES OF WORK

Hygienists employed in Massachusetts work primarily in dentists' offices or dental clinics (96%), although a small percentage (1%) work in hospitals.

JOB OUTLOOK

Employment prospects for dental hygienists are expected to be very good through the 1980's. Good opportunities should also exist for those seeking part-time positions and for those willing to work in rural areas. Recent graduates may face some competition for beginning jobs as the number of graduates from dental hygiene programs has been increasing.

SCHOOLS

The following schools in Massachusetts offer programs in dental hygiene.

Associate Degree Programs

Bristol Community College,
Fall River

Middlesex Community College,
Bedford

Cape Cod Community College,
West Barnstable

Springfield Technical Community
College, Springfield

Forsyth School for Dental Hygiene,
in affiliation with Northeastern
University, Boston

Quinsigamond Community College,
Worcester

FOR MORE INFORMATION

Additional information on career requirements and opportunities for dental hygienists is available from the following sources.

Occupational Outlook Handbook

U.S. Department of Labor
Bureau of Labor Statistics

Division of Professional Development
American Dental Hygienists Association
444 North Michigan Ave., Suite 3400
Chicago, Illinois 60611

Commission on Dental Accreditation
American Dental Association
211 East Chicago Ave.
Chicago, Illinois 60611

DIETICIANS AND DIETETIC TECHNICIANS

NATURE OF THE WORK

Dietitians use scientific skills to assess the nutritional needs of both healthy and sick individuals. They may plan individual diets for hospital patients, supervise meal preparation at schools and institutions, engage in research into the dietary needs of special groups such as the elderly, teach, work in community health programs, or provide private nutritional counseling services. Technicians assist dietitians in their work by handling many of the day-to-day tasks needed to support nutritional and food service programs which dietitians have planned. Salaries range widely for both dietitians and technicians depending upon their education and experience and the geographic location and the type of industry of their employers. Wages for dietitians, for example, range from around \$17,000 to about \$25,000 a year, although starting salaries can be as low as \$13,400. Experienced hospital dietitians can earn over \$40,000 a year.

TRAINING REQUIRED

Dietitians must possess a bachelor's degree in dietetics, nutrition or food science. A graduate degree is usually needed for those wishing to go into research or education. Dietetic technicians should possess an associate degree from a program in dietetic technology, or foods and nutrition, although those with fewer years of training can sometimes enter the field as assistants. The American Dietetic Association certifies dietitians who meet education and experience requirements and who pass a written examination. Certification is preferred by many employers.

PLACES OF WORK

Dietetic technicians employed in Massachusetts work predominately in the following industries.

Hospitals	82%	Outpatient Care Facilities	3%
Nursing and Personal Care Facilities	14%		

Dietitians are found in a wider range of industries as shown below.

Hospitals	42%	Social Services, n.e.c. (such as Community Development Organizations and Self-Help Organizations such as AA)	2%
Nursing and Personal Care Facilities	40%		
Federal Government	3%		
Child Care Facilities	3%	Outpatient Care Facilities	1%
Residential Care	2%	Individual and Family Social Services	1%
		Miscellaneous Personal Services, such as Health Clubs and Reducing Salons	1%

JOB OUTLOOK

The rapidly expanding needs of hospitals and long-term care facilities and increased awareness of the importance of nutrition for good health will continue to spur demand for dietitians. Employment opportunities will be best for dietetic technicians who have received formal training.

SCHOOLS

Programs for dietetic technicians are available at the following Massachusetts schools.

Associate Degree Programs

Essex Agricultural Technical Institute, Haverhill	Holyoke Community College, Holyoke
Greenfield Community College, Greenfield	Laboure Junior College, Boston

Bachelor and Graduate Degree Programs

Atlantic Union College,
Lancaster

Boston University, Boston

Framingham State College,
Framingham, (Master's also)

Massachusetts General Hospital
Institute of Health Professions,
Boston (Master's only)

Massachusetts Institute of
Technology, Boston (Master's
and Doctorate also)

Simmons College, Boston

Tufts University School of
Nutrition, Medford (Master's
and Doctorate only)

University of Massachusetts,
Amherst (Master's also)

FOR MORE INFORMATION

Additional information on career requirements and opportunities for dieticians and dietetic technicians is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

American Institute of Nutrition
9650 Rockville Pike
Bethesda, Maryland 20014

American Dietetic Association
430 North Michigan Ave.
Chicago, Illinois 60611

ELECTROCARDIOGRAPH (EKG) TECHNICIANS

NATURE OF THE WORK

Electrocardiograph technicians maintain and operate an instrument called an electrocardiograph which measures electrical activity in the heart muscle. Electrodes, which the technician places on the patient's chest, pick up these electrical impulses which are recorded on a strip of paper for later analysis by a physician. These tracings are used in diagnosing heart disorders and disease or for monitoring a patient's heart over a period of time. EKG technicians generally earn starting salaries of between \$10,000 to \$13,000 a year, though experienced technicians can earn over \$22,000 a year.

TRAINING REQUIRED

EKG technicians are usually trained on the job at hospitals, clinics, and other medical facilities in programs lasting from one month to one year. A high school diploma is generally required for entry into these programs. With additional training, technicians can often advance to more complex and sophisticated cardiovascular system testing. The American Cardiology Technologists Association offers credentialing exams. Certification or registration through this organization is an asset when seeking employment.

PLACES OF WORK

EKG technicians employed in Massachusetts work primarily in hospitals (87%) or for the federal government (12%).

JOB OUTLOOK

Good opportunities should exist for EKG technicians through the remainder of the 1980's, although there may be some competition for positions at large city hospitals. Increases in the proportion of elderly are expected to generate demand for EKG technicians since the greatest need for cardiac testing occurs among this population group.

SCHOOLS

The following school offers a 15 week course (1 night per week) in electrocardiography through its Division of Continuing Education. No degree or certificate is awarded.

Middlesex Community College, Bedford

FOR MORE INFORMATION

Additional information on career requirements and opportunities in electrocardiography is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

American Cardiology Technologists
Association
11800 Sunrise Valley
Suite 808
Reston, Virginia 22091

ELECTROENCEPHALOGRAPHIC TECHNICIANS AND TECHNOLOGISTS

NATURE OF THE WORK

Electroencephalographic (EEG) technicians and technologists maintain and operate an instrument called an electroencephalograph which measures differences in electrical activity between various areas of the brain to provide data for physicians to use in diagnosing and treating brain injuries and disorders. Technicians and technologists place electrode leads on the patient's scalp and monitor equipment while an EEG recording is made. Technologists with their broader knowledge may also assume supervisory, teaching or administrative duties. Salaries generally range from \$11,000 to \$20,000 a year depending upon education, experience, geographic location and range of duties.

TRAINING REQUIRED

Many technicians learn their skills in on-the-job training programs lasting six months to one year which are offered by hospitals and clinics. The minimum entry requirement for these programs is usually a high school diploma. With further training and experience technicians can advance to the technologist level. Technicians and technologists may also train in two year associate degree programs. Registration, available through the American Board of Registration of Electroencephalographic Technologists (ABRET), is an asset for those seeking employment or advancement.

PLACES OF WORK

Almost all EEG technicians and technologists employed in Massachusetts work in hospitals and clinics.

JOB OUTLOOK

Although employment is expected to show an increase, the number working in this field is relatively small and annual openings in the State are projected to average only 10 a year through the remainder of the 1980's. Job prospects will be best for those who have received formal postsecondary training or who are registered by ABRET.

SCHOOLS

The following school in Massachusetts offers an Associate Degree program in electroencephalographic technology.

Laboure Junior College, Boston

FOR MORE INFORMATION

In addition to local hospitals and clinics, the following sources can provide information on career requirements and opportunities in electroencephalography.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

American Hospital Association
840 North Lake Shore Dr.
Chicago, Illinois 60611

American Board of Certified/
Registered EEG Technicians-
Technologists
P.O. Box 7068
Jacksonville, Florida 32210

The Psychological Corporation
304 E. 45th Street
New York, New York 10017

American Board of Registration
of Electroencephalographic
Technologists, Inc.
Secretary
California-Davis Medical Center
EEG Laboratory, Room 5203
Sacramento, California 95817

American Society of EEG
Technologists
Executive Office
Sixth at Quint
Carrol, Iowa 51401

EMERGENCY MEDICAL TECHNICIANS

NATURE OF THE WORK

Emergency medical technicians (EMT's) are trained to provide prompt, appropriate, and efficient care to victims of accidents, sudden illness or other trauma prior to and during transportation to a medical facility. They may be called upon to treat cardiopulmonary problems such as heart failure using cardiac resuscitation; to provide airway, fracture, or hemorrhage management; to assist in emergency childbirth; or to provide special care to individuals suffering from exposure to heat, cold, fire or poison. EMT's also must keep their ambulances properly supplied and equipment in good working order. Although wages depend greatly on

education, experience, and geographic location, EMT's earn generally from \$7,000 to \$14,000 a year. Those with more advanced training earn higher salaries, in the range of \$10,000 to \$20,000 a year. Many EMT's volunteer their services, although the trend toward paid EMT employment is increasing.

TRAINING REQUIRED

Emergency medical technicians must be licensed to practice in Massachusetts. Minimum educational requirements for the license include completion of a Basic EMT course, including classroom and field instruction. EMT-Paramedic, the highest category of EMT, requires additional training beyond the basic course. EMT's must satisfy continuing education requirements and renew their licensing certificates every two years. EMT licensing is handled by the Office of Emergency Medical Services within the Department of Health.

PLACES OF WORK

Emergency medical technicians work primarily for the rescue squad or ambulance services of city and town police and fire departments, but some also work for private ambulance companies or for hospitals.

JOB OUTLOOK

Beginners can expect to face competition for available positions, particularly with police and fire departments. With the burgeoning of the specialized field of emergency medicine, the occupation is becoming more professionalized and this may generate opportunities in emergency medical services at nursing homes, factories, sports events and on flights and cruises. Also, with the growing number of elderly, some expansion can be expected in firms providing medical and emergency transportation services.

SCHOOLS

The following schools in Massachusetts offer programs for emergency medical technicians.

Certificate Programs

Amesbury Hospital, Amesbury	Burbank Hospital, Fitchburg
Acquinas Junior College, Newton	Cooley Dickinson Hospital, Northampton
Belchertown State School, Belchertown	Dean Junior College, Franklin
Berkshire Community College, Pittsfield	Emerson Hospital, Concord
Berkshire Medical Center, Pittsfield	Fairview Hospital, Great Barrington
Boston City Hospital, Boston	Greenfield Community College, Greenfield
Bristol Community College, Fall River	Human Services Training Institute, West Springfield
Brockton Area EMS Committee, Avon	Laboure Junior College Boston
Bunker Hill Community College, Charlestown	Leonard Morse Hospital, Natick

Lynn Hospital,
Lynn

Marlborough Hospital,
Marlborough

Mass. Maritime Academy,
Buzzards Bay

Middlesex Community College,
Bedford

Monson Developmental
Center, Palmer

Morton Hospital,
Taunton

Mt. Auburn Hospital,
Cambridge

Nashoba Community Hospital,
Ayer

New Bedford EMS Training
Academy, New Bedford

Newton's Emerg. Med. Co.,
Athol

North Adams State College,
North Adams

Northeastern University,
Dedham

Northern Essex Community
College, Haverhill

North Shore Community
College, Beverly

Quincy City Hospital,
Quincy

Quinsigamond Community
College, Worcester

Sancta Maria Hospital,
Cambridge

Springfield Technical Comm.
College, Springfield

St. Joseph's Hospital,
Lowell

University of Lowell
Lowell

University of Massachusetts,
Boston

Mt. Wachusett Community
College, Gardner

Wing Memorial Hospital,
Palmer

Worcester Public Schools,
Worcester

FOR MORE INFORMATION

Additional information on career requirements and opportunities for emergency medical technicians is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

National Registry of Emergency
Medical Technicians
P.O. Box 29233
Columbus, Ohio 43229

National Assoc. of Emergency
Medical Technicians
P.O. Box 334
Newton Highlands, Massachusetts 02161

Massachusetts Department of
Public Health
Office of Emergency Medical
Services
150 Tremont St., 8th Floor
Boston, Massachusetts 02111

LICENSED PRACTICAL NURSES

NATURE OF THE WORK

Licensed practical nurses (LPN's), under the supervision of doctors and registered nurses, provide much of the day-to-day care of physically and mentally ill patients. They may feed and bathe patients, record temperature and blood pressure readings, give medications, help prepare patients for surgery, assist patients with dressing and personal hygiene, and provide comfort and counsel to patients and their families. Although employed primarily in hospitals and nursing homes, LPN's also work in private homes and doctors' offices. Practical nurses earn generally from \$11,000 to \$19,000 a year, depending upon their experience and on the type and location of their employer. LPN's employed in nursing homes and hospitals in large metropolitan areas usually enjoy the highest salaries.

TRAINING REQUIRED

Practical nurse training programs generally last one year and include both classroom study and clinical practice. Nurses must be licensed by the Board of Registration in Nursing in order to practice in Massachusetts. Applicants must complete an approved practical nursing program and pass a written examination. Advancement to a position as a registered nurse requires additional training. Some schools structure their programs to allow students to work as LPN's while they continue their studies toward the RN license.

PLACES OF WORK

Most licensed practical nurses employed in Massachusetts work in the following industries.

Hospitals & Clinics	60%	Doctors' Offices	2%
Nursing & Personal Care Facilities	23%	Residential Care Facilities	1%
Personnel Supply Services, such as Nurses' Registries	7%	Private Households	1%
		Outpatient Care Facilities	1%

JOB OUTLOOK

Opportunities should be very favorable for individuals seeking positions as licensed practical nurses through the remainder of the 1980's. There will be a need for practical nurses to care for the growing elderly population, to provide additional health care resulting from expansion in public and private health insurance plans, and for private duty nursing.

Schools

The following schools in Massachusetts offer LPN training programs.

Certificate/Diploma Programs

Assabet Valley Vocational Technical School, Marlboro	Northampton Vocational School, Northampton
Atlantic Union College, Lancaster	Northern Essex Community College, Haverhill
Bristol-Plymouth Regional Vocational Technical School, Taunton	Putnam Vocational Technical High School, Springfield
Charles H. McCann Technical School, North Adams	Quincy Junior College, Quincy
David Hale Fanning School of Health and Technical Occupations, Worcester	Shepard Gill School of Nursing, Boston
Department of Health and Hospitals School of Practical Nursing, Boston	Smith Agricultural Vocational School, Northampton
Diman Regional Technical Institute, Fall River	Southeastern Regional Technical Institute, South Easton
Essex Agricultural and Technical Institute, Hathorne	Southwood Community Hospital School of Nursing, Walpole
Greater Lawrence Regional Vocational Technical High School, Andover	Tewksbury Hospital School of Practical Nursing, Tewksbury
Henry O. Peabody School, Norwood	Western Massachusetts Hospital School of Practical Nursing, Westfield
Lemuel Shattuck Hospital School of Nursing, Jamaica Plain	Whittier Regional Vocational Technical H.S., Haverhill
Massachusetts Soldier's Home School of Practical Nursing, Chelsea	William J. Dean Vocational Technical High School, Holyoke
	Youville Hospital School of Practical Nursing, Cambridge

FOR MORE INFORMATION

Additional information on career requirements and opportunities for licensed practical nurses is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

American Hospital Association
Division of Nursing
840 North Lake Shore Dr.
Chicago, Illinois 60611

American Health Care
Association
1200 15th Street, N.W.
Washington, DC 20005

National Association
for Practical Nurse
Education and Service, Inc.
254 West 31st Street
New York, New York 10001

National Federation of Licensed
Practical Nurses, Inc.
P.O. Box 11038
Durham, North Carolina 27703

National League for Nursing
10 Columbus Circle
New York, New York 10019

MEDICAL ASSISTANTS

NATURE OF THE WORK

Medical assistants support physicians by performing both office and clinical tasks. These may include preparing patients for examination, recording pulse rate and blood pressure readings, assisting with examinations and treatments, arranging for laboratory procedures or hospital admittance, scheduling appointments, and handling insurance, billing and office records. Earnings of medical assistants vary depending upon an assistant's educational background and experience, and on the size and geographical location of the employer's practice. Generally assistants earn between \$8,000 to \$15,000 a year.

TRAINING REQUIRED

Programs in medical assisting last from one to two years. Although physicians sometimes train assistants on the job, they generally prefer to hire individuals who have received formal instruction. Professional recognition in the form of certification or registration is offered by two organizations, American Technologists and the American Association of Medical Assistants. These credentials can be helpful when seeking employment.

PLACES OF WORK

Most medical assistants employed in Massachusetts work in the following industries.

Doctors' Offices	66%	Outpatient Care Facilities	9%
Hospitals & Clinics	16%	Dentists' Offices and Dental Clinics	3%

JOB OUTLOOK

Employment opportunities for medical assistants are expected to be very good through the 1980's, particularly for those who have received formal training.

SCHOOLS

The following schools in Massachusetts offer programs in medical assisting.

Certificate/Diploma Programs

Bay State Junior College,
Boston

Blue Hills Technical Institute,
Canton

Bristol-Plymouth Regional
Vocational Technical High
School, Taunton

Bryman School, Brookline

Dimon Regional Vocational
Technical School,
Fall River

Essex Agricultural and Technical
Institute, Haverhill

David Hale Fanning School of
Health and Technical
Occupations, Worcester

Fisher Junior College, Boston

Charles H. McCann Technical
School, North Adams

Minuteman Regional Vocational
Technical High School,
Lexington

Southeastern Regional Technical
High School, South Easton

Whittier Regional Vocational
Technical High School,
Haverhill

Associate Degree Programs

Bristol Community College,
Fall River

Chamberlayne Junior College,
Boston

Dean Junior College,
Franklin

Mount Ida Junior College,
Newton

Newbury Junior College,
Boston and Holliston

Springfield Technical Community
College, Springfield

FOR MORE INFORMATION

Additional information on career requirements and opportunities in medical assisting can be obtained from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

The American Association of
Medical Assistants
20 North Wacker Dr. Suite 1575
Chicago, Illinois 60606

Accrediting Bureau of Health
Education Schools
Oak Manor Office
29089 U.S. 20 West
Elkhart, Indiana 46514

American Medical Technologists
Registered Medical Assistants
710 Higgins Road
Park Ridge, Illinois 60608

MEDICAL LABORATORY TECHNOLOGISTS,
TECHNICIANS AND ASSISTANTS

NATURE OF THE WORK

Medical laboratory workers - technologists, technicians and assistants - perform tests on human blood, tissue and fluids to determine the absence, presence or extent of disease. Technologists are the most highly skilled. They are not only familiar with the standard procedures of each area of laboratory work, but they are also able to conduct highly complex tests, and are responsible for interpreting and reporting test results to medical personnel and frequently for supervising other laboratory staff. Technicians carry out routine procedures, often aided by assistants, whose other responsibilities include sterilizing equipment, glassware and instruments, labeling and storing specimens, keeping records and ordering supplies. Technicians and technologists often concentrate in one of the major fields of medical laboratory work, such as hematology (study of blood components), histology (study of tissues), cytotechnology (study of cells), microbiology (study of bacteria and parasites), chemistry (analysis of chemical components of body fluids), or blood bank technology (typing, classifying, storing and processing blood). Salaries vary widely and are dependent upon education, experience, geographic location and the size of the laboratory. Generally, technologists earn from \$16,000 to \$29,000 a year - technicians from \$12,000 to \$17,000 a year. Assistants earn less than technicians.

TRAINING REQUIRED

Technologists usually must possess a bachelor's degree with specific training in medical technology. Graduate study is often needed to specialize and for most teaching and research positions. Technicians complete a two year associate degree program and assistants a one year certificate level program. Smaller laboratories located outside large urban areas frequently employ few, if any, workers at the technologist level and have a larger overlap of duties at the technician and assistant levels. (Assistants often have the title of clinical laboratory technicians.) As a result, these employers often seek graduates of two year programs to fill their assistant level positions. This upgrading in skill requirements is occurring throughout the occupation as it becomes more professionalized. Professional credentials, such as certification and registration, are becoming increasingly valued by employers and are particularly helpful to those seeking advancement.

PLACES OF WORK

Technicians and technologists employed in Massachusetts work in the following industries.

<u>Technologists</u>		<u>Technicians</u>	
Hospitals & Clinics	82%	Hospitals & Clinics	81%
Medical/Dental Laboratories	9%	Medical/Dental Laboratories	9%
Federal Government	5%	Other Health and Allied Services, such as Blood Banks and Donor Stations	4%
Doctors' Offices	3%	Doctors' Offices	4%

JOB OUTLOOK

Opportunities for technologists are expected to be best in the larger cities, particularly in the hospitals and research laboratories in the Boston area, since these employers require highly skilled personnel to staff their laboratories. Because of technological advances in medical laboratory equipment, technicians and assistants are now able to perform some of the complex procedures that once required a technologist's skill. As a result, smaller hospitals, clinics, and private laboratories tend to employ primarily technician and assistant level staff, thus generating fewer opportunities for technologists. All medical laboratory workers can expect to face some competition for beginning jobs. Those with formal training, specialized skill, professional credentials, or those working toward these credentials, and individuals willing to work on weekend and night shifts will enjoy the best prospects.

SCHOOLS

The following schools in Massachusetts offer programs in medical laboratory technology.

Certificate Programs

Blue Hills Technical
Institute, Canton

Southeastern Regional Vocational
Technical High School,
South Easton

Associate Degree Programs

Bay State Junior College,
Boston

Massachusetts Bay Community
College, Wellesley Hills

Blue Hills Technical
Institute, Canton

Mount Ida Junior College,
Newton

Bristol Community College,
Fall River

Mount Wachusett Community
College, Gardner

Lasell Junior College,
Newton

Northeastern University-
University College,
Boston

North Shore Community
College, Beverly

Middlesex Community
College, Bedford

Springfield Technical Community
College, Springfield

Bachelor Degree Programs

American International
College, Springfield

Anna Maria College,
Paxton

Assumption College,
Worcester

Atlantic Union College,
So. Lancaster

Elms College,
Chicopee

Emmanuel College,
Boston

Fitchburg State College,
Fitchburg

Framingham State College,
Framingham

Merrimack College,
No. Andover

North Adams State College,
North Adams

Northeastern University,
Boston (also Master's)

Regis College,
Weston

Southeastern Massachusetts
University, No. Dartmouth

Springfield College,
Springfield

Stonehill College,
North Easton

University of Lowell,
Lowell

University of Massachusetts,
Amherst

FOR MORE INFORMATION

Additional information on career requirements and opportunities in the field of medical laboratory technology is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

Accrediting Bureau of Health
Education Schools

Oak Manor Office
29080 U.S. 20 West
Elkhart, Indiana 46514

American Medical Technologists
710 Higgins Rd.
Park Ridge, Illinois 60068

American Society of Clinical
Pathologists
Board of Registry
P.O. Box 12270
Chicago, Illinois 60612

American Society for Medical
Technology
330 Meadowfern Dr.
Houston, Texas 77067

National Certification Agency
for Clinical Laboratory
Technology

818 Olive St.
St. Louis, Missouri 63101

National Certification Agency
for Medical Laboratory
Personnel

1725 DeSales Street, N.W.
Washington, D.C. 20036

Committee on Allied Health
Education and Accreditation
535 North Dearborn Street
Chicago, Illinois 60610

MEDICAL RECORD ADMINISTRATORS, TECHNICIANS AND CLERKS
AND MEDICAL TRANSCRIPTIONISTS

NATURE OF THE WORK

The medical record is a detailed account of the care and treatment provided to a patient. It includes such information as x-ray and test results, hospitalization and surgical history, and the diagnoses and comments of attending physicians. In large medical facilities, such as hospitals, clinics, and nursing homes, these records are maintained in medical record departments supervised by administrators who are responsible for insuring the accuracy and security of these records. Administrators may also be involved in designing and maintaining automated patient information systems which provide computerized storage of and access to medical records. Technicians and clerks perform much of the day-to-day work of coding, indexing, filing and retrieving records. In smaller medical centers and offices, medical record technicians often have responsibility for the handling of medical records, sometimes supported by clerks. Medical transcriptionists prepare medical records. They type up and organize the notes, reports, and dictation of physicians and other medical specialists according to prescribed formats. Salaries for medical record personnel vary considerably, depending upon an individual's education, experience and range of duties, and on the size, type and geographic location of the employer.

TRAINING REQUIRED

Medical record administrators prepare through a 4 year bachelor's program in medical record administration, or supplement a bachelor's degree from a related field with a certificate or graduate degree in medical record administration. Technicians complete an associate degree program, while clerks generally receive their training on the job. Transcriptionists train in one-year certificate programs, which frequently accept only applicants who have good typing skills. With the wider use of computers for organizing and storing medical records, training or experience with computers or word processing systems is becoming increasingly valuable. Professional certification or registration conferred by the American Medical Record Association is also an asset to those seeking employment or advancement.

PLACES OF WORK

Medical record administrators and technicians employed in Massachusetts work primarily in the following industries.

Hospitals & Clinics	56%	Outpatient Care Facilities	4%
Nursing and Personal Care Facilities	28%	Offices or other Health Practitioners, such as Podiatrists and Psychologists	1%
Federal Government	8%	Individual & Family Social Services	1%

These industries are also major employers of medical transcriptionists, although exact percentages are not available. Transcriptionists also work for doctors, in medical laboratories, insurance companies, and for medical transcription services.

JOB OUTLOOK

A combination of forces will contribute to the demand for trained medical record personnel through the 1980's. Among these will be the creation of new facilities and the expansion of existing services to meet the needs of a growing elderly population. In addition, legislative efforts focused on containing medical costs and changes in medical insurance payment procedures will require medical institutions to have precise information about treatments and tests ordered for patients and will force better control of and access to medical records data. This will further accelerate the trend toward computerized patient information systems. Individuals who have received formal training in medical record technology, and particularly those who also have computer related experience or training, will enjoy the best prospects.

SCHOOLS

The following schools in Massachusetts offer programs in medical record technology/administration.

Associate Degree Programs

Holyoke Community College,
Holyoke

Massachusetts Bay Community College,
Wellesley Hills

Laboure Junior College,
Boston

Northern Essex Community College,
Haverhill

Bachelor Degree Programs

Northeastern University,
Boston

University College, Northeastern
University, Boston

The following schools offer programs in medical transcription.

Certificate Programs

Holyoke Community College
Holyoke

Northern Essex Community College,
Haverhill

Massasoit Community College,
Brockton

North Shore Community College,
Beverly

Minuteman Regional Vocational
Technical High School,
Lexington

FOR MORE INFORMATION

Additional information on career requirements and opportunities for medical record personnel is available from the following sources

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

American Medical Record Association
John Hancock Center, Suite 1850
875 North Michigan Avenue
Chicago, Illinois 60611

American Association for Medical
Transcription
P.O. Box 6187
Modesto, California

NUCLEAR MEDICINE TECHNOLOGISTS

NATURE OF THE WORK

Nuclear medicine technologists prepare solutions containing radioactive substances (radiopharmaceuticals) to be swallowed by or injected into the patient. Radioactive materials are absorbed differently by healthy and diseased organs and these differences can be detected by special scanners and captured on film to assist physicians with diagnoses. In addition to preparing and administering radiopharmaceuticals, technologists position patients for diagnostic procedures, operate nuclear detecting instruments, and process film for later review by a physician. Nuclear medicine technologists generally earn from \$16,000 to \$21,500 a year, depending upon education, experience, and geographic location.

TRAINING REQUIRED

Nuclear medicine, a specialty within the broader field of radiologic technology, requires two to four years of postsecondary training, through a program or concentration in nuclear medicine technology. Training is also available in the Armed Forces. The American Registry of Radiologic Technologists offers professional credentials to qualified candidates upon successful completion of a written examination. Since diagnostic procedures employing nuclear materials are becoming more complex, employers often prefer to hire and promote technologists who are registered or who meet registration requirements.

PLACES OF WORK

Almost all nuclear medicine technologists employed in Massachusetts work in the radiology departments of hospitals and clinics.

JOB OUTLOOK

Opportunities are expected to be favorable for individuals trained in nuclear medicine technology through the 1980's. Improvements in equipment and expansion in the diagnostic capabilities of nuclear medicine are expected to increase the demand for highly skilled and well trained personnel. Persons trained in this field will enjoy better prospects than less specialized radiologic technologists.

SCHOOLS

The following schools in Massachusetts offer programs in nuclear medicine technology.

Associate Degree Programs

Bunker Hill Community
College, Charlestown

Springfield Technical Community
College, Springfield

Bachelor Degree Programs

Anna Maria College,
Paxton

Massachusetts College of
Pharmacy & Allied Health
Professions, Boston

Salem State College,
Salem

Worcester State College,
Worcester

FOR MORE INFORMATION

Additional information on career requirements and opportunities in nuclear medicine technology is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor,
Bureau of Labor Statistics

American Society of Radiologic
Technologists
1500 Central Ave, S.E.
Albuquerque, New Mexico 87123

Nuclear Medicine Technologists
Certification Board
P.O. Box 1034
Stone Mountain, Georgia 39986

Society of Nuclear Medicine
475 Park Avenue, South
New York, New York 10016

NURSES' AIDES AND ORDERLIES

NATURE OF THE WORK

Nurses' aides and orderlies provide routine patient care under the supervision of registered nurses or licensed practical nurses. They may bathe and feed patients, change linens and make beds, and help transport patients to treatment and testing units. These aides generally earn from \$8,000 to \$15,000 a year, depending upon their experience and the geographic area in which they work. Those employed in nursing homes or hospitals in large metropolitan areas usually have the highest wages.

TRAINING REQUIRED

Formal training is not required. Most aides acquire their skills in on-the-job training programs which last 6-8 weeks. Employers generally prefer to hire high school graduates for these programs. Volunteer work or graduation from a nurse assisting training program can also provide the requisite skills and experience. Advancement to a licensed nursing position requires additional training.

PLACES OF WORK

Most nurses' aides and orderlies employed in Massachusetts work in the following industries.

Nursing and Personal Care Facilities	51%	Federal Government	4%
Hospitals & Clinics	32%	Residential Care Facilities	3%
Health and Allied Services, such as Visiting Nurse Associations	4%	Individual and Family Social Services	3%

JOB OUTLOOK

Opportunities are expected to be very good for aides and orderlies through the 1980's. This is an occupational field with high turnover, so many openings are created each year to replace individuals who leave the profession. Additional

opportunities will be generated as medical services expand to meet the needs of a growing elderly population.

SCHOOLS

While training of aides and orderlies is almost entirely on-the-job, the following schools offer nurse assisting programs which provide the basic skills.

Diman Regional Vocational
Technical High School,
Fall River (12 weeks)

Essex Agricultural and Technical
Institute, Hathorne
(10 weeks)

FOR MORE INFORMATION

Local hospitals and other patient care facilities can provide additional information about employment opportunities for nurses' aides and orderlies. Two organizations which can provide information on nursing careers are listed below.

American Hospital Association
Division of Nursing
840 North Lake Shore Dr.
Chicago, Illinois 60611

American Health Care
Association
1200 15th Street, N.W.
Washington, DC 20005

OCCUPATIONAL THERAPISTS AND ASSISTANTS

NATURE OF THE WORK

Occupational therapists plan and conduct therapy programs, in consultation with physicians and other specialists, to help patients who have physical, emotional, or developmental disabilities to improve motor strength, concentration and endurance and to gain or regain work and daily living skills. Therapists may also design and construct supportive devices, such as braces and splints, and adapt environments for the handicapped. Assistants work with individual patients as directed by therapists and may also maintain supplies and equipment and keep records. Earnings for both therapists and assistants vary widely depending upon education, experience and geographic location, generally ranging from around \$17,000 to \$25,000 a year for therapists, and \$11,000 to \$18,000 a year for assistants.

TRAINING REQUIRED

At a minimum occupational therapists need a bachelor's degree in occupational therapy. Assistants should have completed a two year postsecondary program or have received training in the Armed Forces. Individuals interested in this field can expect to face keen competition for entry into occupational therapy training programs and early application is advised. Both therapists and assistants must be licensed by the Board of Registration of Allied Health Professions in order to practice in Massachusetts. Professional certification for both therapists and assistants is offered through the American Occupational Therapy Association.

PLACES OF WORK

Most occupational therapists and assistants employed in Massachusetts work in the following industries.

Hospitals & Clinics	58%	Other Health & Allied Services, such as Visiting Nurse Associations	3%
Nursing and Personal Care Facilities	16%	Job Training and Vocational Rehabilitation Services	3%
Federal Government	6%	Individual and Family Social Services	2%
Outpatient Care Facilities	5%	Child Day Care Facilities	2%

JOB OUTLOOK

Job prospects will continue to be favorable for occupational therapists and assistants through the 1980's. A greater emphasis on the needs of handicapped individuals and expansion of rehabilitative services for the elderly will contribute to growth in this field.

SCHOOLS

The following schools in Massachusetts offer programs in occupational therapy.

Certificate/Diploma Programs

Becker Junior College,
Worcester

Quinsigamond Community College,
Worcester

Associate Degree Programs

Becker Junior College,
Worcester

Quinsigamond Community College,
Worcester

North Shore Community
College, Beverly

Bachelor and Master Degree Programs

Boston University,
Boston

Tufts University,
Medford

FOR MORE INFORMATION

Additional information on career requirements and opportunities in occupational therapy is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

American Occupational Therapy
Association
1383 Piccard Drive, Suite 300
Rockville, Maryland 20850

OPTOMETRIC AND OPHTHALMIC
ASSISTANTS AND TECHNICIANS

NATURE OF THE WORK

Optometric and ophthalmic assistants and technicians support optometrists and ophthalmologists through a combination of office and patient care tasks. Optometrists are licensed to provide basic vision care including testing patients' eyes, prescribing corrective lenses, and fitting eyeglasses and contact lenses. Ophthalmologists are medical doctors who, in addition to providing basic vision care, specialize in treating eye disorders and injuries, sometimes with the aid of drug therapy or surgery. These eye-care professionals employ assistants to perform routine procedures, such as helping patients select eyeglass frames, teaching eye exercises, or providing instruction in the care and handling of contact lenses, and may also have them handle office tasks, such as appointment scheduling and billing. Technicians are more skilled and may conduct simple vision testing or glaucoma screening, administer eyedrops or other medications, or test lenses against prescription specifications. Technicians employed by ophthalmologists may occasionally assist during in-office eye surgery. Salaries vary widely depending upon education and experience, hours worked, and the size and location of the employer's practice.

TRAINING REQUIRED

Most optometric assistants are trained on the job, although some optometrists prefer to hire graduates of formal training programs. Ophthalmic assistants generally complete a one year training program. Optometric and ophthalmic technicians complete a two year program.

PLACES OF WORK

Most optometric and ophthalmic assistants and technicians work in the professional offices of optometrists and ophthalmologists. Some work in clinics and hospitals.

JOB OUTLOOK

Opportunities are expected to be good through the 1980's, particularly for graduates of formal training programs. Because of high turnover, positions for assistants may be more prevalent than positions for technicians.

SCHOOLS

The following schools in Massachusetts offer training for optometric and ophthalmic technicians and assistants.

Certificate Program

Worcester Industrial Technical
Institute, Worcester

Associate Degree Programs

New England College of
Optometry, Boston

Newbury Junior College,
The Optical Institute,
Boston

FOR MORE INFORMATION

Additional information on career requirements and opportunities is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

American Optometric Association
Paraoptometric Section
243 North Lindbergh Blvd.
St. Louis, Missouri 63141

Joint Commission of Allied Health
Personnel in Ophthalmology
1575 University Avenue
St. Paul, Minnesota 55104

PHYSICAL THERAPISTS AND ASSISTANTS

NATURE OF THE WORK

Physical therapists, in consultation with physicians and other specialists, plan and conduct treatment programs for patients who have physical impairments, handicaps, or injuries to help them attain maximum function and to help them adjust to the limiting effects of their disabilities. Treatment may include exercise to improve strength and coordination or massage to relieve pain, stiffness and muscle spasms. Assistants work with individual patients as directed by therapists and may also clean and set up equipment, help in lifting and moving patients, keep records and maintain cleanliness and order in treatment areas. Wages vary depending upon education, experience, and geographic location, but generally therapists earn from \$17,000 to \$24,000 a year, and assistants from \$12,000 to \$18,000 a year.

TRAINING REQUIRED

Physical therapists must hold a bachelor's degree in physical therapy, or a bachelor's degree in a related field supplemented by a certificate or master's degree in physical therapy. A graduate degree is usually needed to teach or do research. Assistants should be graduates of a two year postsecondary program in physical therapy. Individuals interested in this field should expect to face keen competition for entry into training programs. Both therapists and assistants must be licensed by the Board of Registration of Allied Health Professions in order to practice in Massachusetts.

PLACES OF WORK

Physical therapists and assistants employed in Massachusetts work in the following industries.

<u>Therapists</u>			
Hospitals & Clinics	52%	Elementary and Secondary Schools	3%
Offices of other Health Practitioners, such as Offices of Physiotherapists	9%	Doctors' Offices	3%
Health and Allied Services, such as Visiting Nurse Associations	8%	Federal Government	2%
Nursing and Personal Care Facilities	8%	Individual and Family Social Services	1%
State Government (except Hospitals and Education)	7%	Outpatient Care Facilities	1%

<u>Assistants</u>			
Hospitals & Clinics	60%	Doctors' Offices	2%
Nursing and Personal Care Facilities	26%	Health and Allied Services, such as Visiting Nurse Associations	2%
Offices of other Health Practitioners, such as Offices of Physiotherapists	7%	Outpatient Care Facilities	1%

JOB OUTLOOK

Opportunities are expected to remain very good for physical therapists and assistants through the 1980's. One factor spurring demand will be the need for additional rehabilitative services for our growing elderly population.

SCHOOLS

The following schools in Massachusetts offer programs in physical therapy.

Associate Degree Assistant Programs

Becker Junior College, Worcester	North Shore Community College, Beverly
Lasall Junior College, Auburndale	Springfield Technical Community College, Springfield
Newbury Junior College, (Holliston campus)	

Bachelor and Master Degree Programs

Boston University, Boston	Mass. General Hospital, Boston (Master's only)
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Northeastern University,
Boston

Simmons College,
Boston (Bach. only)

Springfield College,
Springfield

University of Lowell,
Lowell (Bach. only)

FOR MORE INFORMATION

Additional information on career requirements and opportunities for physical therapists and physical therapist assistants is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

American Physical Therapy
Association
1156 15th Street, N.W.
Washington, DC 20005

PSYCHIATRIC AIDES

NATURE OF THE WORK

Psychiatric aides, sometimes called mental health or psychiatric technicians, help care for emotionally disturbed, mentally ill or mentally retarded patients in psychiatric hospitals, state facilities, and in community health centers and group homes. They observe patients, interview and counsel patients and their families, and participate in daily recreation, work, and treatment programs. They may also perform simple nursing tasks such as taking temperatures, giving medications, and assisting patients with dressing and personal hygiene. Salaries for psychiatric aides average around \$8,000 to \$12,000 a year.

TRAINING REQUIRED

Educational requirements vary widely from employer to employer depending upon specific job responsibilities. Many psychiatric aides learn their skills on the job. However, certificate and associate degree programs in mental health and social or human services provide very good preparation and may be required for some positions. Training is also available in the Armed Forces.

PLACES OF WORK

Most psychiatric aides employed in Massachusetts work in the following industries.

Hospitals & Clinics	84%	Individual and Family	3%
Nursing and Personal Care Facilities	11%	Social Services	

JOB OUTLOOK

Opportunities for psychiatric aides are expected to remain good through the 1980's. Those who have received formal training will have an advantage in obtaining or advancing to supervisory positions.

SCHOOLS

The following schools in Massachusetts offer programs in mental health (technology).

Certificate Programs

Bunker Hill Community
College, Charlestown

Northern Essex Community
College, Haverhill

Associate Degree Programs

Middlesex Community
College, Bedford

Northern Essex Community
College, Haverhill

North Shore Community
College, Beverly

Programs in social or human services are offered by the following schools.

Certificate Programs

North Shore Community
College, Beverly

Associate Degree Programs

Aquinas Junior College,
Newton

Merrimack College,
North Andover

Becker Junior College,
Worcester

Middlesex Community College,
Bedford

Berkshire Community College,
Pittsfield

Mount Ida Junior College,
Newton Center

Bristol Community College,
Fall River

Mount Wachusett Community
College, Gardner

Bunker Hill Community
College, Charlestown

North Shore Community College,
Beverly

Dean Junior College,
Franklin

Northern Essex Community
College, Haverhill

Holyoke Community College,
Holyoke

Springfield Technical Community
College, Springfield

Lasell Junior College,
Newton

Suffolk University,
Boston

Massasoit Community College,
Brockton

FOR MORE INFORMATION

The following organization can provide additional information on career requirements and opportunities for psychiatric aides.

The National Association for
Mental Health, Inc.
1800 North Kent Street
Arlington, Virginia 22209

RADIATION THERAPY TECHNOLOGISTS

NATURE OF THE WORK

Radiation therapy is used widely in the treatment of cancer. Because of the dangers associated with radiation, its safe use requires highly skilled personnel. Radiation therapy technologists, working under the close supervision of radiologists, are responsible for calculating radiation dosage, for preparing and positioning patients, and for operating equipment so as to precisely deliver the correct amount of radiation to the affected portion of the patient's body. Because of the high level of technical skill needed for this work, radiation therapy technologists are among the highest paid technologists in the allied health field, with some commanding starting salaries of \$17,000 to \$20,000 a year.

TRAINING REQUIRED

Radiation therapy is a specialty within the broader category of radiologic technology, which also includes x-ray, nuclear medicine, and related imaging and therapeutic technologies. Completion of a program in radiation therapy technology, or a program in radiologic technology with a concentration in radiation therapy, is the general requirement for entry into this field. The American Registry of Radiologic Technologists (ARRT) provides professional registration which is an asset for those seeking employment or advancement.

PLACES OF WORK

Almost all radiation therapy technologists employed in Massachusetts work in hospital or clinic radiology departments.

JOB OUTLOOK

Opportunities for radiation therapy technologists should continue to be very good through the remainder of the 1980's. Because radiation therapy is used extensively in the treatment of cancer and because cancer incidence increases with population age, additional demand for these technologists can be anticipated as the proportion of elderly increases. Individuals with this training will enjoy brighter prospects than will less specialized radiologic technologists.

SCHOOLS

The following schools in Massachusetts offer programs in radiation therapy technology.

Associate Degree Programs

Bunker Hill Community
College, Charlestown

Springfield Technical Community
College, Springfield

Laboure Junior College,
Boston

FOR MORE INFORMATION

Additional information on career requirements and opportunities in radiation therapy is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

American College of Radiology
20 North Wacker Drive
Chicago, Illinois 60606

American Registry of Radiologic
Technologists
2600 Wayzata Boulevard
Minneapolis, Minnesota 55405

American Society of Radiologic
Technologists
15000 Central Ave., S.E.
Albuquerque, New Mexico 87123

Vice President for Professional
Education

American Cancer Society
777 Third Avenue
New York, New York 100017

REGISTERED NURSES

NATURE OF THE WORK

Registered nurses (RN's) carry out the medical treatments prescribed by physicians and also make independent judgements based upon their professional knowledge. Their duties include assisting physicians during treatments and examination, administering medication, observing and monitoring the progress of patients, providing bedside care, counseling patients and family members, and supervising lower level nursing personnel. Nurse specialists have an indepth knowledge of a particular field and know advanced nursing techniques. Nurse anesthetists, for example, are specially trained to administer anesthesia during surgical procedures, while nurse-midwives care for women with normal pregnancies prior to, during and after birth. Salaries for registered nurses on general hospital duty, the largest group of professional nurses, range from \$16,000 to \$23,000 a year. Nurse specialists and nursing administrators can earn salaries in excess of \$30,000 a year.

TRAINING REQUIRED

Programs for registered nurses vary in length from two to five years. Careful consideration should be given to the selection of a program since the type of program an individual chooses can affect future opportunities. Those

interested in teaching, in supervisory or administrative positions, in public health, in research, or in seeking admission to graduate nursing programs should begin in a bachelor's degree program. While credits earned in diploma or associate degree programs are often applicable to the bachelor's program, moving from one program to another can be costly and time consuming. Training for specialty areas usually begins after the RN has been earned. Nurses must be licensed by the Board of Registration in Nursing in order to practice in Massachusetts.

PLACES OF WORK

Most registered nurses employed in Massachusetts work in the following industries.

Hospitals & Clinics	66%	Health and Allied Services, such as Visiting Nurse Associations	3%
Nursing and Personal Care Facilities	8%	Elementary and Secondary Schools	3%
Doctors' Offices	4%	Federal Government	2%
Personnel Supply Services, such as Nurses Registeries	3%	State Government	2%
		Local Government	1%

JOB OUTLOOK

Opportunities for registered nurses are expected to remain good through the 1980's, although in some areas of the State RN's can expect to face strong competition for the more desirable and higher paying positions. Beginners particularly will find improved chances outside large urban areas or on weekend and night shifts. Nurses with a bachelor's degree will have the best chance against competition.

SCHOOLS

The following schools in Massachusetts offer training for registered nurses.

Diploma Programs

Bay State Medical Center School of Nursing, Springfield	Malden Hospital School of Nursing Malden
Brockton Hospital School of Nursing, Brockton	New England Baptist School of Nursing, Boston
Framingham Union Hospital School of Nursing, Framingham	New England Deaconess Hospital School of Nursing, Boston
Lawrence Memorial Hospital School of Nursing, Lawrence	Newton-Wellesley Hospital School of Nursing, Newton Lower Falls
Leominster Hospital School of Nursing, Leominster	Peter Bent Brigham School of Nursing, Boston

Saint Elizabeth's Hospital
School of Nursing,
Brighton

Saint Vincent Hospital
School of Nursing,
Worcester

Somerville Hospital
School of Nursing,
Somerville

Worcester City Hospital
School of Nursing,
Worcester

Worcester Hahneman Hospital
Schhol of Nursing,
Worcester

Associate Degree Programs

Atlantic Union College,
South Lancaster

Becker Junior College,
Worcester

Berkshire Community College,
Pittsfield

Bristol Community College,
Fall River

Bunker Hill Community College,
Charlestown

Cape Cod Community College,
West Barnstable

Greenfield Community College,
Greenfield

Holyoke Community College,
Holyoke

Laboure Junior College,
Boston

Lasell Junior College,
Newton

Massachusetts Bay Community
College, Wellesley Hills

Massasoit Community College,
Brockton

Middlesex Community College,
Bedford

Mount Wachusett Community
College, Gardner

North Shore Community
College, Beverly

Northern Essex Community
College, Haverhill

Quincy Junior College,
Quincy

Quinsigamond Community College,
Worcester

Springfield Technical Community
College, Springfield

Bachelor Degree Programs

American International
College, Springfield

Anna Maria College,
Paxton (Master's also)

Atlantic Union College,
South Lancaster

Boston College,
Chesnut Hill (also Master's)

Boston University, Boston
(also Master's and Doctorate)

Curry College, Milton

Emmanuel College,
Boston

Eastern Nazzerene College,
Quincy

Elms College,
Chicopee

Fitchburg State College,
Fitchburg

Massachusetts General Hospital,
Boston (Master's only)

Northeastern University,
Boston

Salem State College,
Salem

Simmons College,
Boston

Southeastern Massachusetts
University, North
Dartmouth

Stonehill College,
North Easton

University of Lowell,
Lowell

University of Massachusetts
Amherst and Boston,
(also Master's)

Worcester State College,
Worcester

FOR MORE INFORMATION

Additional information on career requirements and opportunities for registered nurses is available from the following sources.

Occupational Outlook Handbook

U.S. Department of Labor
Bureau of Labor Statistics

American Health Care
Association
1200 15th Street, N.W.
Washington, DC 20005

American Hospital Association
Division of Nursing
840 North Lake Shore Drive
Chicago, Illinois 60611

American Nurses' Association
2420 Pershing Road
Kansas City, Missouri 64108

Career Information

National League for Nursing
10 Columbus Circle
New York, New York 10019

Massachusetts Nurses' Association
376 Boylston Street
Boston, Massachusetts 02116

National Student Nurses Assoc.
10 Columbus Circle, Room 2330
New York, New York 10019

Information on selected nursing specialties is provided by the following organizations.

American Association of
Nurse Anesthetists
216 Higgins Road
Park Ridge, Illinois 60068

American Association of Occupational
Health Nurses
575 Lexington Ave.
New York, New York 10016

The Association of Operating
Room Nurses
10170 East Mississippi Avenue
Denver, Colorado 80231

RESPIRATORY THERAPISTS, TECHNICIANS AND ASSISTANTS

NATURE OF THE WORK

Individuals trained in providing respiratory care work with patients who have heart-lung disorders. The problems they seek to relieve may be caused by a chronic condition, such as emphysema or asthma, result from surgical complications, or be due to an emergency, such as stroke, heart failure, drowning,

or shock. They perform diagnostic tests on the respiratory system, teach relaxation techniques and breathing exercises, and use a variety of equipment designed to support respiratory functions, such as respirators, oxygen masks and devices which deliver therapeutic gases and mists into the lungs. There are three levels of workers in the field: therapists, technicians and assistants. Therapists and technicians perform essentially the same duties, although the therapist generally has more training or experience and may have teaching or supervisory responsibilities. Assistants often do not deal directly with patients, but spend much of their time taking care of equipment. Wages for therapists generally range from \$14,000 to \$20,000 a year, depending upon education and experience, while technicians and assistants earn from \$9,000 to \$15,000 a year, although experienced technicians can earn more.

TRAINING REQUIRED

Generally, assistants learn their skills on the job in about six months, while postsecondary training is needed for technicians and therapists. Technicians usually enter a one year certificate program and therapists two year (associate degree) or four year (bachelor's degree) programs. Professional registration conferred by the National Board for Respiratory Care is becoming increasingly valued, particularly at large city and teaching hospitals. In addition, registered therapists often enjoy beginning salaries which are higher than those who do not possess this credential.

PLACES OF WORK

Respiratory therapy workers are employed primarily by hospitals (91%), although some work in nursing and personal care facilities (1%) and in the offices of licensed health practitioners (3%).

JOB OUTLOOK

Opportunities should be good for respiratory therapy workers through the remainder of the 1980's, due in part to the increasing health demands of a growing elderly population. Individuals lacking formal training, however, may experience some difficulty in obtaining jobs, particularly at city hospitals. Those who are certified or registered or eligible for these credentials will have an advantage in competition for openings.

SCHOOLS

The following schools in Massachusetts offer training programs in respiratory therapy.

Certificate Programs

Newbury Junior College,
Holliston Campus

Northern Essex Community
College, Haverhill

Associate Degree Programs

Laboure Junior College,
Boston
Massasoit Community College,
Brockton

Newbury Junior College,
Holliston Campus
North Shore Community
College, Beverly

Northeastern University,
Boston

Northern Essex Community
College, Haverhill

Quinsigamond Community College,
Worcester

Springfield Technical Community
College, Springfield

Bachelor Degree Program

Northeastern University,
Boston

FOR MORE INFORMATION

Additional information on career requirements and opportunities in respiratory therapy is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

American Association for
Respiratory Therapy
1720 Regal Row, Suite 112
Dallas, Texas 75235

The National Board for Respiratory
Care, Inc.
11015 West 75th Terrace
Shawnee Mission, Kansas 66214

SURGICAL TECHNOLOGISTS

NATURE OF THE WORK

Surgical technologists (also called surgical technicians or operating room technicians) serve as general technical assistants before, during, and after surgical operations. Under the direction of registered nurses and other supervising surgical staff, they stock the operating room, prepare patients for surgery, pass instruments to the surgeon, inventory sponges and instruments used during surgery, handle specimens, and sterilize and clean the operating room following surgery. Salaries generally range from \$10,000 to \$19,000 a year, depending upon education, experience and geographic location.

TRAINING REQUIRED

Most technologists train in one year certificate or two year associate degree programs or in the Armed Forces. The Liason Council on Certification confers professional certification which can be helpful when seeking employment.

PLACES OF WORK

Almost all surgical technologists employed in Massachusetts work in hospitals.

JOB OUTLOOK

Opportunities for surgical technologists are expected to be good through the remainder of the 1980's for those who have been formally trained or who are certified. Persons without these qualifications can expect to face competition for jobs of their choice.

SCHOOLS

The following schools in Massachusetts offer programs in operating room/surgical technology.

Certificate Programs

Dimock Community Health
Center, (A Bay State
Skills Corporation
Program) Boston

Essex Agricultural and
Technical Institute,
Hathorne

D.H. Fanning School
Health and Technical
Occupations, Worcester

Charles H. McCann Technical
School, North Adams

Quincy Junior College, Quincy

Associate Degree Program

Springfield Technical Community
College, Springfield

FOR MORE INFORMATION

Additional information on career requirements and opportunities for surgical technologists is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics

Association of Surgical
Technologists
Caller No. E
Littleton, Colorado 80120

ULTRASOUND TECHNICIANS

NATURE OF THE WORK

Ultrasound technicians, more properly called diagnostic medical sonographers, operate equipment which uses high frequency sonic (sound) energy to generate images on a monitor (TV screen) which show the shape and composition of body parts. Ultrasound is used frequently for fetal monitoring and for studying the heart. Technicians apply a conducting gel to the body surface and move a scanning device over the patient's body, frequently checking the monitor to maintain image clarity and to note features of internal areas under study. They may also make a photograph or film record of the scan for later study by a physician. These technicians earn generally between \$16,000 to \$21,000 a year, depending upon education, experience and geographic location.

TRAINING REQUIRED

Programs in diagnostic medical sonography usually last one or two years. However, they are not now widely available and most ultrasound technicians currently employed acquired their skills on the job. Hospitals frequently provide in-service training in ultrasound techniques to radiology department staff members.

PLACES OF WORK

Most ultrasound technicians employed in Massachusetts work in hospital or clinic radiology departments.

JOB OUTLOOK

Ultrasound offers several advantages over other imaging systems, such as x-ray, due to its relative safety and low cost. Its use as a diagnostic tool continues to expand as technical improvements are made in the quality of the images produced. However, the ease of use of the equipment has thus far made it possible for hospitals and other medical facilities to teach operating skills on the job to existing staff, generally from their radiology departments. This trend is likely to continue and may limit opportunities for individuals trained exclusively in ultrasound techniques.

SCHOOLS

The following school offers an Associate Degree program in diagnostic medical sonography.

Middlesex Community College,
Bedford

FOR MORE INFORMATION

Additional information on career requirements and opportunities in diagnostic medical sonography is available from the following sources.

American Society of Radiologic
Technologists
1500 Central Avenue, S.E.
Albuquerque, New Mexico 87123

Society of Diagnostic Medical
Sonographers
P.O. Box 31782
Dallas, Texas 75231

American Registry of Diagnostic
Medical Sonographers
2810 Burnet avenue, Suite N2
Cincinnati, Ohio 45219

X-RAY TECHNICIANS

NATURE OF THE WORK

X-ray technicians, also called diagnostic radiologic technologists, take x-ray pictures which doctors use in diagnosing and treating injuries and disease. Technologists prepare and position patients, adjust and operate x-ray equipment for accurate exposures, and process x-ray film for later review by a physician. Radiologic technologists concentrating in x-ray generally earn from \$13,000 to \$19,000 a year depending upon education, experience and geographic location.

TRAINING REQUIRED

The general requirement for entry into this field is completion of a program in radiography or radiologic technology. Technologists can also train in specialties such as radiation therapy and nuclear medicine technology. In addition, employers sometimes provide in-house training in related imaging techniques such as ultrasound (sonography). Specialization and skill with different imaging systems expand a technologist's employment opportunities. Professional certification/registration conferred by the American Registry of Radiologic Technologists (ARRT) is an additional asset for those seeking employment or advancement.

PLACES OF WORK

Most x-ray technicians employed in Massachusetts work in the following industries.

Hospitals & Clinics	70%	Outpatient Care Facilities	1%
Doctors' Offices	25%		
Dentists' Offices and Dental Clinics	1%	Medical/Dental Laboratories	1%

JOB OUTLOOK

The outlook for x-ray technicians who are seeking work in the Northeast is not as promising as for those looking in other areas of the country. Beginning x-ray technicians will face stiff competition particularly in urban areas. Those who have trained in radiation therapy or nuclear medicine technology will have better job prospects.

SCHOOLS

The following schools in Massachusetts offer programs in radiologic technology (x-ray).

Certificate Programs

Mount Auburn Hospital, Cambridge	Salem Hospital, Salem
North Adams Regional Hospital, North Adams	

Associate Degree Programs

Bunker Hill Community College, Charlestown	North Shore Community College, Beverly
Holyoke Community College, Holyoke	Northeastern University, University College, Boston
Massachusetts Bay Community College, Wellesley Hills	Northern Essex Community College, Haverhill
Middlesex Community College, Bedford	Quinsigamond Community College, Worcester
	Springfield Technical Community College, Springfield

FOR MORE INFORMATION

Additional information on career requirements and opportunities for x-ray technicians is available from the following sources.

Occupational Outlook Handbook
U.S. Department of Labor
Bureau of Labor Statistics
American Society of Radiologic
Technologists
15000 Central Avenue, S.E.
Albuquerque, New Mexico 87123

American Society of Radiologic
Technologists
2600 Wayzata Blvd.
Minneapolis, Minnesota 55405

APPENDIX A

**ALPHABETIC INDEX TO SCHOOLS
LISTED IN
CAREERS AND TRAINING
IN THE
ALLIED HEALTH FIELD**

Alphabetic Index to Training Institutions
Listed in this Directory

Amesbury Hospital
Morrill Place
Amesbury, MA 01913
(617) 388-5060

American International College
170 Wilbraham Road
Springfield, MA 01109
(413) 737-5331

Anna Maria College
Paxton, MA 01612
(617) 757-4586

Aquinas Junior College
15 Walnut Park
Newton, MA 02158
(617) 244-8134
and
303 Adams Street
Milton, MA 02158
(617) 696-3100

Assabet Valley Regional
Technical School
Fitchburg Street
Marlboro, MA 01752
(617) 485-9430

Assumption College
500 Salisbury Street
Worcester, MA 01609
(617) 752-5615

Atlantic Union College
South Lancaster, MA 01561
(617) 266-0220

Bay Path Junior College
588 Longmeadow Street
Longmeadow, MA 01106
(413) 567-0621

Bay State Junior College
122 Commonwealth Avenue
Boston, MA 02116
(617) 266-0220

Bay State Medical Center School
of Nursing
759 Chestnut Street
Springfield, MA 01107
(413) 787-4303

Becker Junior College
61 Seaver Street
Worcester, MA 01609
(617) 791-9241

Belchertown State School
17 Hospital Dr., P.O. Box 486
Belchertown, MA 01007
(413) 323-6311

Berkshire Community College
West Street
Pittsfield, MA 01201
(413) 499-4660

Berkshire Medical Center
710 North Street
Pittsfield, MA 01201
(413) 684-0906

Blue Hills Regional Vocational
Technical Institute
100 Randolph Street
Canton, MA 02021
(617) 828-5800

Boston City Hospital
818 Harrison Avenue
Boston, MA 02118
(617) 424-4347

Boston College
Chestnut Hill, MA 02167
(617) 969-0100

Boston University
Boston, MA 02115
(617) 353-2300

Boston University, Metropolitan
College
Boston, MA 02115
(617) 353-3000

Bristol Community College
777 Elsbree Street
Fall River, MA 02720
(617) 678-2811

Bristol-Plymouth Regional
Vocational Technical High
School
940 County Street
Taunton, MA 02780
(617) 823-5151

Brockton Area EMS Committee
P.O. Box 684
Avon, MA 02322
(617) 584-1053

Brockton Hospital School
of Nursing
685 Centre Street
Brockton, MA 02402
(617) 586-2600

Bryman School
323 Boylston Street
Brookline, MA 02146
(617) 241-8600

Bunker Hill Community College
New Rutherford Avenue
Charlestown, MA 02129
(617) 241-8600

Burbank Hospital
Nicholas Road
Fitchburg, MA 01420
(617) 345-4311

Cape Cod Community College
West Barnstable, MA 02668
(617) 362-2131

Chamberlayne Junior College
128 Commonwealth Avenue
Boston, MA 02116
(617) 536-4500

Charles H. McCann Technical
School
Hodges Cross Road
North Adams, MA 02147
(413) 663-5383

Cooley Dickinson Hospital
30 Locust Street
Northampton, MA 01060
(413) 584-4090

Curry College
Milton, MA 02186
(617) 333-0500

David Hale Fanning School
of Health Occupations
251 Belmont Street
Worcester, MA 01602
(617) 779-1975

Dean Junior College
99 Main Street
Franklin, MA 02038
(617) 528-9100

Department of Health and Hospitals
School of Practical Nursing
35 Northampton Street
Boston, MA 02118
(617) 424-5426

Diman Regional Vocational
Technical High School
Stonehaven Road
Fall River, MA 02723
(617) 678-2891

Dimock Community Health Center
55 Dimock Street
Roxbury, MA 02119
(617) 442-8800

Elms College
291 Springfield Street
Chicopee, MA 01013
(413) 598-8351

Emerson Hospital
Old Rd. to Nine Acre Corner
Concord, MA 01742
(617) 369-1400, Ext. 1459

Emmanuel College
No. 400 The Fenway
Boston, MA 02115
(617) 277-9340

Essex Agricultural and
Technical Institute
562 Maple Street
Hathorne, MA 01937
(617) 774-0050

Fairview Hospital
Lewis Avenue
Great Barrington, MA 01230
(413) 528-0790

Fisher Junior College
118 Beacon Street
Boston, MA 02116
(617) 262-3240

Fitchburg State College
160 Pearl Street
Fitchburg, MA 01420
(617) 345-2151

Forsyth School for
Dental Hygienists
140 The Fenway
Boston, MA 02115
(617) 262-5200

Framingham Union Hospital
School of Nursing
85 Lincoln Street
Framingham, MA 01701
(617) 879-7111, Ext. 2215

Framingham State College
100 State Street
Framingham, MA 01701
(617) 620-1220

Franklin Institute of Boston
41 Berkeley Street
Boston, MA 02116
(617) 423-4630

Goddard Memorial Hospital
209 The Summer Street
Stoughton, MA 02702
(617) 344-5100

Greater Lawrence Regional
Vocational Technical School
57 River Road
Andover, MA 01810
(617) 686-0194

Greenfield Community College
College Drive
Greenfield, MA 01301
(413) 774-3131

Henry O. Peabody School
Peabody Road
Norwood, MA 02062
(617) 762-1470

Holyoke Community College
303 Homestead Avenue
Holyoke, MA 01040
(413) 538-7000

Human Services Training Institute
1111 Elm Street
West Springfield, MA 01089
(413) 734-4395

Laboure Junior College
2120 Dorchester Avenue
Dorchester, MA 02124
(617) 296-8300

Lasell Junior College
Newton, MA 02166
(617) 243-2000

Lawrence Memorial Hospital
School of Nursing
170 Govenors Avenue
Medford, MA 02155
(617) 396-9250, Ext. 273

Lemuel Shattuck Hospital
School for Practical Nursing
170 Morton Street
Jamaica Plain, MA 02130
(617) 522-8110

Leominster Hospital School
Of Nursing
Hospital Road
Leominster, MA 01543
(617) 537-4811, Est. 256

Leonard Morse Hospital
67 Union Street
Natick, MA 01760
(617) 653-3400

Lowell General Hospital
295 Varnum Avenue
Lowell, MA 01854
(617) 454-0411

Lynn Hospital
212 Boston Street
Lynn, MA 01904
(617) 598-5100, Ext. 548

Lynn Vocational Regional
Technical High School
80 Neptune Boulevard
Lynn, Ma 01902
(617) 598-6020

Malden Hospital School
of Nursing
Malden, MA 02148
(617) 322-7560, Ext. 5261

Marlborough Hospital
57 Union Street
Marlborough, MA 01752
(617) 485-1121, Ext. 234

Massachusetts Bay Community
College
50 Oakland Street
Wellesley Hills, MA 02181
(617) 237-1100

Massachusetts College of
Pharmacy
179 Longwood Avenue
Boston, MA 02115
(617) 734-6700

Massachusetts General Hospital
Institute of Health Professions
40 Blossom Street
Boston, MA 02114
(617) 726-3140

Massachusetts Institute of
Technology
77 Massachusetts Avenue
Cambridge, MA 02139
(617) 253-1000

Massachusetts Maritime Academy
P.O. Box D
Buzzards Bay, MA 02532
(617) 759-5761

Massachusetts Soldier's Home
School of Practical Nursing
Chelsea, MA 02150
(617) 884-5660, Ext. 178

Massasoit Community College
One Massasoit Boulevard
Brockton, MA 02402
(617) 588-9100

Merrimack College
North Andover, MA 01845
(617) 683-7111

Middlesex Community College
Springs Road
Bedford, Ma 01730
(617) 275-8910

Minuteman Regional Vocational
Technical High School
758 Marrett Road
Lexington, MA 02173
(617) 861-6500, Ext. 226

Monson Developmental Center
Drawer F
Palmer, MA 01069
(413) 283-3411

Morton Hospital
88 Washington Street
Taunton, MA 02780
(617) 824-6911

Mount Auburn Hospital
330 Mount Auburn Street
Cambridge, MA 02138
(617) 492-3500

Mount Ida Junior College
777 Dedham Street
Newton Center, MA 02159
(617) 969-7000

Mount Wachusett Community College
444 Green Street
Gardner, MA 01440
(617) 772-0200

Nashoba Community Hospital
200 Groton Road
Ayer, MA 01432
(617) 772-0200

New Bedford EMS Training Academy
1204 Purchase Street
New Bedford, MA 02740
(617) 999-2931

Newbury Junior College
921 Boylston Street
Boston, MA 02115
(617) 262-9350

New England Baptist Hospital
School of Nursing
91 Parker Hill Avenue
Boston, MA 02120
(617) 738-5800, Ext. 321

New England College of
Optometry
424 Beacon Street
Boston, MA 02115
(617) 261-3432

New England Deaconess Hospital
School of Nursing
1 Autumn Street
Boston, MA 02215
(617) 732-8343

Newton's Emergency Medical Co.
P.O. Box 306
Athol, MA 01331
(617) 249-9081

Newton-Wellesley Hospital
School of Nursing
Newton Lower Falls, MA 02162
(617) 964-2800, Ext. 2537

North Adams Regional Hospital
Hospital Avenue
North Adams, MA 01247
(413) 664-4511

Northampton Vocational School
380 Elm Street
Northampton, MA 01060
(413) 586-6970

Northeastern University
Lincoln College
University College
360 Huntington Avenue
Boston, MA 02115
(617) 731-7000

Northeastern University
370 Common Street
Dedham, MA 02026
(617) 899-9371

Northern Essex Community College
100 Elliott Street
Haverhill, MA 01830
(617) 374-0721

North Shore Community College
3 Essex Street
Beverly, MA 01915
(617) 927-4850

Peter Brent Brigham School
of Nursing
75 Francis Street
Boston, MA 02115
(617) 732-5633

Putman Vocational Technical
High School
1300 State Street
Springfield, MA 01109
(413) 737-4731

Quincy City Hospital
114 Whitwell Street
Quincy, MA 02169
(617) 773-6100

Quincy Junior College
34 Coddington Street
Quincy, MA 02169
(617) 786-8777

Quinsigamond Community College
670 West Boylston Street
Worcester, MA 01606
(617) 853-2300

Regis College
Weston, MA 02193
(617) 893-1820

St. Elizabeth's Hospital
School of Nursing
159 Washington Street
Brighton, MA 02135
(617) 782-7000, Ext. 2364

St. Joseph's Hospital
220 Pawtucket Street
Lowell, MA 01854
(617) 453-1761

St. Vincent Hospital
School of Nursing
25 Winthrop Street
Worcester, MA 01604
(617) 698-6272

Salem Hospital
81 Highland Avenue
Salem, MA 01970
(617) 741-1200, Ext. 3027

Salem State College
352 Lafayette Street
Salem, MA 01970
(617) 745-0556

Sancta Maria Hospital
799 Concord Avenue
Cambridge, MA 02138
(617) 868-2100

Shepard-Gill School of
Practical Nursing
(of Massachusetts
General Hospital)
226 Newbury Street
Boston, MA 02116
(617) 536-8410

Simmons College
No. 300 The Fenway
Boston, MA 02115
(617) 738-2000

Smith Agriculture Vocational
Technical School
80 Locust Street
Northampton, MA 01060
(413) 586-6970

Somerville Hospital
School of Nursing
125 Lowell Street
Somerville, MA 02143
(617) 666-4400, Ext. 246

Southeastern Mass. University
Old Westport Road
North Dartmouth, MA 02747
(617) 997-9321

Southeastern Regional Vocational
Technical High School
250 Foundry Street
South Easton, MA 02375
(617) 238-4371

Southwood Community Hospital
School of Nursing
P.O. Box #11
Walpole, MA 02032
(617) 668-0385, Ext. 331

Springfield College
263 Alden Street
Springfield, MA 01109
(413) 787-2100

Springfield Technical Community
College
Armory Square
Springfield, MA 01101
(413) 781-7822

Stonehill College
Washington Street
North Easton, MA 02356
(617) 238-1081

Suffolk University
Beacon Hill
Boston, MA 02114
(617) 723-4700

Tewksbury Hospital School
of Practical Nursing
East Street
Tewksbury, MA 01876
(617) 851-7321

Tufts University School of
Nutrition
Medford, MA 02155
(617) 628-5000

University of Lowell
One University Avenue
Lowell, MA 01854
(617) 452-5000

University of Massachusetts
Amherst, MA 01003
(413) 545-2211

and
Harbor Campus
Boston, MA 02125
(617) 929-7000

Western Massachusetts Hospital
School of Nursing
911 East Mountain Road
Westfield, MA 01085
(413) 568-3311

Whittier Regional Vocational
Technical High School
115 Amesbury Line Road
Haverhill, MA 01830
(617) 373-3410

Wing Memorial Hospital
Wright Street
Palmer, MA 01069
(413) 538-8264

W.J. Dean Vocational Technical
High School
325 Pine Street
Holyoke, MA 01040
(413) 538-8264

Worcester City Hospital
School of Nursing
26 Queen Street
Worcester, MA 01610
(617) 799-8210

Worcester Hahneman Hospital
School of Nursing
281 Lincoln Street
Worcester, MA 01605
(617) 757-7751, Est. 326

Worcester Industrial
Technical Institute
26 Salisbury Street
Worcester, MA 01608
(617) 799-1945

Worcester Public Schools
20 Irving Street
Worcester, MA 01609
(617) 798-0187

Worcester State College
486 Chandler Street
Worcester, MA 01602
(617) 793-8000

Youville Hospital School of
Practical Nursing
1575 Cambridge Street
Cambridge, MA 02138
(617) 876-4344

APPENDIX B

**SERVICE DELIVERY AREAS
SPONSORING TRAINING
UNDER THE
JOB TRAINING PARTNERSHIP ACT**

MASSACHUSETTS

JOB TRAINING PARTNERSHIP ACT (JTPA)

SERVICE DELIVERY AREAS

GOVERNOR MICHAEL S. DUKAKIS

EVELYN F. MURPHY
SECRETARY OF ECONOMIC AFFAIRS

Ms. Catherine N. Stratton
Associate Secretary
Office of Economic Affairs
Office of Training and
Employment Policy
C.F. Hurley Bldg., 4th Floor
Government Center
Boston, Massachusetts 02114
(617) 727-2252 or 727-6230

MUNICIPALITIES SERVED

EXECUTIVE OFFICE

BERKSHIRE

ADAMS	NEW ASHFORD
ALFORD	NEW MARLBOROUGH
BECKET	NORTH ADAMS
CHESHIRE	OTIS
CLARKSBURG	PERU
DALTON	PITTSFIELD
EGREMONT	RICHMOND
FLORIDA	SAVOY
GREAT BARRINGTON	SANDISFIELD
HANCOCK	SHEFFIELD
HINSDALE	STOCKBRIDGE
LANESBOROUGH	TYRINGHAM
LEE	WASHINGTON
LENOX	WEST STOCKBRIDGE
MONTEREY	WILLIAMSTOWN
MOUNT WASHINGTON	WINDSOR

Berkshire Training and
Employment Program
400 Columbus Avenue
Pittsfield, MA 01201
(413) 499-2220

BOSTON

BOSTON

Neighborhood Development
and Employment Agency
City of Boston
15 Beacon Street
Boston, MA 02108
(617) 720-4300

SERVICE DELIVERY AREAS

MUNICIPALITIES SERVED

BRISTOL

ATTLEBORO	RAYNHAM
BERKLEY	REHOBOTH
DIGHTON	SEEKONK
FALL RIVER	SOMERSET
MANSFIELD	SWANSEA
NORTH ATTLEBORO	TAUNTON
NORTON	WESTPORT

EXECUTIVE OFFICE

Bristol County Training
Consortium
85 North Main Street
Fall River, MA 02720
(617) 675-1161

BROCKTON AREA

ABINGTON	EAST BRIDGEWATER
AVON	HANSON
BRIDGEWATER	STOUGHTON
BROCKTON	WHITMAN
EASTON	WEST BRIDGEWATER

Brockton Area Private Industry
Council
P.O. Box 2278
Brockton, MA 02403
(617) 584-1887

FRANKLIN/HAMPSHIRE

AMHERST	MIDDLEFIELD
ASHFIELD	MONROE
ATHOL	MONTAGUE
BELCHERTOWN	NEW SALEM
BERNARDSTON	NORTHAMPTON
BUCKLAND	NORTHFIELD
CHARLEMONT	ORANGE
CHESTERFIELD	PELHAM
COLRAIN	PETERSHAM
CONWAY	PHILLIPSTON
CUMINGTON	PLAINFIELD
DEERFIELD	ROWE
EASTHAMPTON	ROYALSTON
ERVING	SHELBURNE
GILL	SHUTESBURY
GOSHEN	SOUTHAMPTON
GRANBY	SOUTH HADLEY
GREENFIELD	SUNDERLAND
HADLEY	WARE
HATFIELD	WARWICK
HAWLEY	WENDELL
HEATH	WESTHAMPTON
HUNTINGTON	WHATELY
LEVERETT	WILLIAMSBURG
LEYDEN	WORTHINGTON

Franklin/Hampshire Employment
and Training Consortium
57 Wells Street
Greenfield, MA 01301
(413) 774-3182

SERVICE DELIVERY AREAS

MUNICIPALITIES SERVED

HAMPDEN

AGAWAM	MONTGOMERY
BLANDFORD	MONSON
BRIMFIELD	PALMER
CHESTER	RUSSELL
CHICOPEE	SOUTHWICK
EAST LONGMEADOW	SPRINGFIELD
GRANVILLE	TOLLAND
HAMPDEN	WALES
HOLLAND	WESTFIELD
HOLYOKE	WEST SPRINGFIELD
LONGMEADOW	WILBRAHAM
LUDLOW	

EXECUTIVE OFFICE

Hampden County Employment and
Training Consortium
1176 Main Street
Springfield, MA 01101
(413) 781-6900

METRO NORTH

ARLINGTON	READING
BELMONT	REVERE
BURLINGTON	SOMERVILLE
CAMBRIDGE	STONEHAM
CHELSEA	WAKEFIELD
EVERETT	WATERTOWN
MALDEN	WILMINGTON
MEDFORD	WINCHESTER
MELROSE	WITHROP
NORTH READING	WOBBURN

Employment Resources, Inc.
50 Essex Street
Cambridge, MA 02139
(617) 492-0591

METRO SOUTH/WEST

ACTION	MEDFIELD
ASHLAND	MEDWAY
BEDFORD	MILLIS
BELLINGHAM	NATICK
BOXBOROUGH	NEEDHAM
BROOKLINE	NEWTON
CARLISLE	NORFOLK
CANTON	NORWOOD
CONCORD	PLAINVILLE
DEDHAM	SHARON
DOVER	SHERBORN
FOXBOROUGH	SOUTHBOROUGH
FRAMINGHAM	STOW
FRANKLIN	SUDBURY
HOLLISTON	WALPOLE
HOPKINTON	WALTHAM
HUDSON	WAYLAND
LEXINGTON	WELLESLEY
LINCOLN	WESTON
LITTLETON	WESTWOOD
MARLBOROUGH	WRENTHAM
MAYNARD	

Metro South/West Employment
and Training Administration
P.O. Box 740
Norwood, MA 02062
(617) 769-4120

SERVICE DELIVERY AREAS

MUNICIPALITIES SERVED

EXECUTIVE OFFICE

NEW BEDFORD/CAPE COD AND ISLANDS

ACUSHNET	MARION
BARNSTABLE	MASHPEE
BOURNE	MATTAPOISETT
BREWSTER	NANTUCKET
CHATHAM	NEW BEDFORD
CHILMARK	OAK BLUFFS
DARTMOUTH	ORLEANS
DENNIS	PROVINCETOWN
EASTHAM	ROCHESTER
EDGARTOWN	SANDWICH
FAIRHAVEN	TISBURY
FREETOWN	WAREHAM
GAY HEAD	WELLFLEET
GOSNOLD	WEST TISBURY
HARWICH	YARMOUTH
LAKEVILLE	

Office for Job Partnerships
P.O. Box A-2102
New Bedford, MA 02741
(617) 999-3161 -

LOWER MERRIMACK VALLEY

AMESBURY	MERRIMACK
ANDOVER	NEWBURY
BOXFORD	NEWBURYPORT
GEORGETOWN	NORTH ANDOVER
GROVELAND	ROWLEY
HAVERHILL	SALISBURY
LAWRENCE	WEST NEWBURY
METHUEN	

Department of Training and
Manpower Development
237 Essex Street
Lawrence, MA 01840
(617) 685-3527

NORTHERN MIDDLESEX

BILLERICA	LOWELL
CHELMSFORD	TEWKSBURY
DRACUT	TYNGSBOROUGH
DUNSTABLE	WESTFORD

Office of Employment and
Training
89 Appleton Street
Lowell, MA 01852
(617) 459-2336

SERVICE DELIVERY AREAS

MUNICIPALITIES SERVED

EXECUTIVE OFFICE

NORTHERN WORCESTER

ASHBURNHAM	LANCASTER
ASHBY	LEOMINSTER
AYER	LUNENBURG
BARRE	PEPPERELL
BERLIN	PRINCETON
BOLTON	SHIRLEY
CLINTON	STERLING
FITCHBURG	TEMPLETON
GARDNER	TOWNSEND
GROTON	WINCHENDON
HARVARD	WESTMINSTER
HUBBARDSTON	

Montachusett Employment and
Training Program
130 Elm Street
Gardner, MA 01440
(617) 632-3193

SOUTH COASTAL

BRAINTREE	MIDDLEBOROUGH
CARVER	MILTON
COHASSET	NORWELL
DUXBURY	PEMBROKE
HALIFAX	PLYMOUTH
HANOVER	PLYMPTON
HINGHAM	QUINCY
HOLBROOK	RANDOLPH
HULL	ROCKLAND
KINGSTON	SCITUATE
MARSHFIELD	WEYMOUTH

South Coastal Career
Development Administration
11 Hayward Street
North Quincy, MA 02171
(617) 328-7300

SOUTHERN ESSEX

BEVERLY	MIDDLETON
DANVERS	NAHANT
ESSEX	PEABODY
GLOUCESTER	ROCKPORT
HAMILTON	SALEM
IPSWICH	SAUGUS
LYNN	SWAMPSCOTT
LYNNFIELD	TOPSFIELD
MANCHESTER	WENHAM
MARBLEHEAD	

North Shore Employment
Training
Lynn City Hall
Room 302 A
Lynn, MA 01901
(617) 745-9280

SERVICE DELIVERY AREAS

MUNICIPALITIES SERVED

EXECUTIVE OFFICE

SOUTHERN WORCESTER

AUBURN	NORTH BROOKFIELD
BLACKSTONE	NORTHBOROUGH
BOYLSTON	OAKHAM
BROOKFIELD	OXFORD
CHARLTON	PAXTON
DOUGLAS	RUTLAND
DUDLEY	SHREWSBURY
EAST BROOKFIELD	SOUTHBRIDGE
GRAFTON	SPENCER
HARDWICK	STURBRIDGE
HOLDEN	SUTTON
HOPEDALE	UPTON
LEICESTER	UXBRIDGE
MENDON	WARREN
MILBURY	WEBSTER
MILFORD	WESTBOROUGH
NEW BRAINTREE	WEST BROOKFIELD
NORTHBRIDGE	WORCESTER

Southern Worcester County
Service Delivery
Midtown Mall
22 Front Street, Suite 201
Worcester, MA 01614
(617) 799-1590

